Amendments to the Specification:

Please replace paragraph beginning at page 2, line 4 from the bottom, which starts with "Firstly, in the usual structure" with the following amended paragraph:

--Firstly, in the usual structure, since the rod shaped heater is inserted ~~traverse~~ transversely in a vibration propagating direction, the propagation of vibration is apt to be interrupted by the heater. Especially, when a large heater is combined with a horn of a small size employed for compact electronic parts, the above-described influence obviously occurs. Accordingly, in the usual bonding tool, a heating operation with high efficiency has been hardly compatible with the realization of stable vibration characteristics.--

Please replace paragraph beginning at page 3, line 3 from the bottom, which starts with "A bonding device defined in claim 1 " with the following amended paragraph:

--A bonding device defined in claim 1 is a device for bonding an object to be bonded under pressure to a surface to be bonded by allowing a load and vibration to act on the object to be bonded. The bonding device comprises:
a bonding tool abutting on the object to be bonded and a pressing unit for pressing the bonding tool to the object to be bonded. The bonding tool includes a ~~traverse~~ transversely elongated horn, a vibrator for applying a longitudinal vibration to the horn in a first direction along the longitudinal direction of the horn, a protruding part protruding from the horn in a second direction substantially perpendicular to the first direction, a bonding operation part provided in the end part of the protruding part

to abut on the object to be bonded and a heating unit inserted into a mounting hole provided in the horn. The heating unit is mounted into the mounting hole with a space maintained between the inner surface of the mounting hole and the heating unit.--

Please replace paragraph beginning at page 4, line 6 from the bottom, which starts with "A bonding device defined in claim 3 " with the following amended paragraph:

--A bonding device defined in claim 3 is characterized in that the vent part is a ~~traverse~~ transversely elongated slit in the first direction.--

Please replace paragraph beginning at page 5, line 1 from the top, which starts with "A bonding device tool in claim 5 " with the following amended paragraph:

--A bonding tool defined in claim 5 is a tool for bonding an object to be bonded under pressure to a surface to be bonded by allowing a load and vibration to act on the object to be bonded. The bonding tool comprises: a ~~traverse~~ transversely elongated horn; a vibrator for applying a longitudinal vibration to the horn in a first direction along the longitudinal direction of the horn; a protruding part protruding from the horn in a second direction substantially perpendicular to the first direction; a bonding operation part provided in the end part of the protruding part to abut on the object to be bonded; and a heating unit inserted into a mounting hole provided in the horn. The heating unit is mounted into the mounting hole with a space maintained between the inner surface of the mounting hole and the heating unit.--

Please replace paragraph beginning at page 5, line 6 from the bottom, which starts with "A

bonding tool defined in claim 7 " with the following amended paragraph:

--A bonding tool defined in claim 7 is characterized in that the vent part is a ~~traverse~~ transversely elongated slit in the first direction.--

Please replace paragraph beginning at page 6, line 1 from the top, which starts with "A bonding tool defined in claim 9 " with the following amended paragraph:

--A bonding tool defined in claim 9 is a tool for bonding an object to be bonded under pressure to a surface to be bonded by allowing a load and vibration to act on the object to be bonded, the bonding tool. The bonding tool comprises: a ~~traverse~~ transversely elongated horn, a vibrator applying a longitudinal vibration to the horn in a first direction along the longitudinal direction of the horn, a protruding part protruding from the horn in a second direction substantially perpendicular to the first direction, a bonding operation part, provided in the end part of the protruding part to abut on the object to be bonded and, a rod shaped heating unit, inserted into the first direction of the horn.--

Please replace paragraph beginning at page 6, line 8 from the bottom, which starts with "A bonding tool defined in claim 11 " with the following amended paragraph:

--A bonding tool defined in claim 11 is characterized in that the vent part is a ~~traverse~~ transversely elongated slit in the first direction.--

Please replace paragraph beginning at page 11, line 2 from the bottom, which starts with "As shown in Fig. 2(a)" with the following amended paragraph:

--As shown in Fig. 2(a), the bonding tool 14 has the

~~traverse~~ transversely elongated horn 15 as a main body. The horn 15 is made of ,for example, a metal material (for instance, stainless steel, aluminum, titanium, etc.) and is formed in a rod shape rectangular in section. In one side end part of the horn 15, the vibrator 17 is mounted. The dimensions of height and width of the rectangular section may be changed continuously or stepwise along the longitudinal direction of the horn. Thus, the vibration applied by vibration applying means can be adjustably enlarged or reduced in the horn 15. The vibrator 17 is driven to apply a longitudinal vibration to a first direction (a direction shown by an arrow mark a) along the longitudinal direction of the horn 15. Accordingly, the vibrator 17 serves as the vibration applying means for applying the vibration to the first direction along the longitudinal direction of the horn 15.--

Please replace paragraph beginning at page 18, line 8 from the bottom, which starts with "In the vicinity of a left end face of the horn 15" with the following amended paragraph:

--In the vicinity of a left end face of the horn 15, a plurality of slits 15g are provided in a horizontal direction (a vertical direction relative to the surface of a sheet in Fig. 3) perpendicular to the longitudinal direction. When the heater 18 is continuously operated, heat generated from the heater 18 is transmitted to the horn 15 and further to the vibrator 17 to raise the temperature of the vibrator 17. Since the temperature rise of the vibrator 17 constitutes a factor to vary the vibration characteristics, the heat transfer to the vibrator 17 is desirably suppressed as much as possible. Therefore, in the

horn 15 shown in this embodiment, the slits 15g are provided before the vibrator 17 in the heat transfer direction, so that the heat transmitted through the horn 15 is radiated by the slits 15g to reduce a quantity of heat transfer to the vibrator 17 as much as possible. That is, the ~~traverse~~ transversely elongated slits 15g serve as a vent part for preventing the heat transfer to the vibrator formed in the horn 15 between the vibrator 17 and the bonding operation part 31. Cooling means for cooling the vent part is desirably provided. As the cooling means, air supply means for supplying air to the slits 15g may be employed. As the air supply means, means for supplying compressed air through a tube or means for supplying air by a fan may be employed.--

Please replace the Abstract of the Disclosure with the following revised abstract:

A bonding device is for bonding an object to be bonded under pressure to a surface to be bonded by allowing a load and vibration to act on the object to be bonded. The bonding device includes a bonding tool 14 abutting on the object to be bonded, and a pressing unit pressing the bonding tool to the object to be bonded. The bonding tool includes a ~~traverse~~ transversely elongated horn, a vibrator 17 applying a longitudinal vibration to the horn 15 in a first direction along the longitudinal direction of the horn a protruding part 30 protruding from the horn in a second direction substantially perpendicular to the first direction, a bonding operation part 31 provided in the end part of the protruding part 30 to abut on the object to be bonded, and a heating unit inserted into a mounting hole provided

in the horn. The heating unit is mounted into the mounting hole with a space maintained from the inner surface of the mounting hole.

Attachment: Replacement Sheet

A bonding device is for bonding an object to be bonded under pressure to a surface to be bonded by allowing a load and vibration to act on the object to be bonded. The bonding device includes a bonding tool 14 abutting on the object to be bonded, and a pressing unit pressing the bonding tool to the object to be bonded. The bonding tool includes a transversely elongated horn, a vibrator 17 applying a longitudinal vibration to the horn 15 in a first direction along the longitudinal direction of the horn a protruding part 30 protruding from the horn in a second direction substantially perpendicular to the first direction, a bonding operation part 31 provided in the end part of the protruding part 30 to abut on the object to be bonded, and a heating unit inserted into a mounting hole provided in the horn. The heating unit is mounted into the mounting hole with a space maintained from the inner surface of the mounting hole.